

REDUCING COST OF PORK PRODUCTION



PIGS ON OAT AND PEA FORAGE.

(From the United States Department of Agriculture.)

The cost of pork is reduced materially by the use of pasture and forage crops, but it is desirable to feed grain or other concentrated feed in addition. In some sections of the country where pastures are luxuriant, mature hogs are maintained in an apparently satisfactory condition on pasture alone. This practice should not be followed, however, in the case of young, growing pigs, because they will become thin in flesh and stunted if compelled to live on pasture alone.

Hog raisers differ widely regarding the quantity of grain that should be fed to hogs while on pasture. Some feeders give them all they will consume. Others feed a ration equal to about 2 to 3 per cent of the live weight of the hog. Still others will allow pigs to run on pasture and feed them a 1 per cent grain ration. There is no fixed rule governing the supplemental grain ration which should be fed in combination with forage. The amount of grain fed depends upon the kind of pasture used, the price of grain, and the market.

Pasture forage has a variable composition. Alfalfa, clover, vetch, and peas furnish feed much richer in protein than most other crops. Where

hogs are feeding on leguminous pasture they require less concentrated feed than when grazing upon nonleguminous pasture such as timothy, orchard grass, Bermuda, or bluegrass. In the early stages of growth the cereals may be classed as nitrogenous forages. A farmer may have more hogs than his pasture will accommodate. When this is the case, the pasture will last longer if a full grain ration is fed. The more grain a hog consumes, the less forage he will eat.

When grain is high, it is rather expensive to feed a supplemental grain ration. At such times there is a great temptation to place the hogs upon pasture alone. This practice will hardly ever pay, for it generally takes more grain and more time to finish off the hogs than if they had been fed a liberal ration while on pasture.

The amount of grain used will also depend upon the length of time the feeder has in which to fit the hogs for market. Hogs that are marketed from ten to twelve months old are usually maintained on pasture alone during the grazing season. If any grain is given at all it is very light. In this way the greater percentage of growth is made from the cheaply grown forage. Where rapid finishing is desired, the liberal use of grain is important.

GETTING STAND OF ALFALFA

Use Seed Which Is Pure and of Good Vitality—Thick Stand Will Keep Out Weeds.

The amount of seed to sow per acre is variously estimated at from 8 to 20 pounds. It is well to have a rather thick stand the first year, as some of the plants are practically certain to



Alfalfa Plant, Four Years Old.

die, and with a thin stand the stems are coarser and not so palatable, but 10 to 12 pounds of seed per acre is enough to sow.

A small amount of seed which is pure and of good vitality is better than a larger quantity of seed of lower grade.

One advantage of a thick stand is to prevent the weeds getting a foothold. In parts of Kansas, four plants per square foot is considered the best ratio; in Ohio, one every four inches is more common.

The seed may be drilled or sown broadcast and disked or harrowed in. In broadcasting, many people favor sowing one-half the seed in one direction and the remainder at right angles to the first sowing. This is believed to give a more even distribution.

Disking before plowing helps make a firm seed bed.

Sometimes it is possible to get a stand by sowing a few pounds of alfalfa seed with red clover. Then plow up the clover and seed to alfalfa.

The soil will contain enough bacteria to make a good catch fairly certain.

FEEDING SILAGE TO CALVES

In Absence of Other Nutritious Feeds It May Serve as Substitute—Avoid Coarse Parts.

Value of corn silage for young calves is an unsettled question. In the absence of other and more nutritious feeds, it may serve as a good substitute. It should never be fed extensively, and care should be exercised to prevent the feeding of coarse parts.

WARM WEATHER AND HORSES

Sunstroke Caused by Sun's Rays Failing Directly on Skull—Heat Exhaustion Similar.

(By PROF. O'TOOLE, North Dakota Experiment Station.)
Sunstroke is caused by the direct rays of the sun falling upon the skull. A horse so affected may die suddenly as though stricken with apoplexy or he may have a gradual paralysis of respiration. The symptoms which usually present themselves are restlessness, pawing, spasms and a marked redness of the mucous membranes lining the cavities of the head. The temperature in sunstroke may not rise above normal during the whole course of the disease.

Another condition very similar to sunstroke is that known as heat stroke or heat exhaustion. This is brought about by overexertion and insufficient heat elimination. The direct rays of the sun are not responsible for this affection, which very often occurs to an animal on a cloudy, sultry day. Some of the more prominent symptoms of heat stroke are weariness, profuse sweating, difficult breathing, an extremely high temperature, and a rapid pulse, which gradually grows weaker and upon the approach of death muscular tremors will be noted. The treatment for sunstroke and heatstroke are the same. Remove the animal to a cool, quiet, well-ventilated place, and permit a stream of cold water to flow over the horse and if possible apply ice packs to the head. If ice is plentiful apply it all over the body.

TO DESTROY INJURIOUS MICE

Enemies Have Been Killed Off and Little Rodents Have Increased Quite Rapidly.

How to destroy injurious mice is a difficult question. The owl and the hawk are the natural enemies of mice as is the cat, and to some extent the dog, the weasel, the mink, the otter, and the beaver perhaps, but these suspected enemies of the mice have been killed off. There are few of them remaining, thus mice have increased rapidly and it seems necessary to employ strychnine, which may be mixed dry or otherwise with crushed grain or whole grain, wheat or oats. How to place this deadly poison within reach of mice without destroying other useful creatures is a question difficult to decide.

SELLING DIRECT FROM FIELD

Farmers Favor That Plan With Cabbages, Letting Dealers Stand Risk of Storage.

Most farmers prefer to sell their cabbage direct from the field, preferring that the dealers stand the risk of storage; this is probably the better plan. Where it is desired to store cabbage for home use, or even for sale later, one of the many plans in use is that of trenching. A shallow trench is dug and the cabbage laid in it head down, and then covered with soil. Straw, litter, and manure are placed over this to prevent deep freezing. Storing in a warm, damp cellar ruins the flavor of cabbage.

THE SIOUX CITY FAIR

TO SET NEW PACE—WEALTH OF TERRITORY TO BE MIRRORRED AT BIG EXPOSITION.

MILLIONS IN LIVESTOCK

Railroads Help Extend Educational Influence—Miss Ruth Law, Aviatrix, to Join with Ten Vaudeville Acts in Providing Thrills and Fun.

Sioux City, Ia.—Sioux City is planning to entertain 100,000 guests from the outside territory during the week of September 18, when the annual Interstate Livestock Fair will be staged at Woodland park.

Preliminary arrangements for the big exposition have been disposed of by Joe Morton, secretary of the fair, and the business men who are the moving spirits in this annual effort to picture in a tangible way the wealth of Iowa, South Dakota, Nebraska and Minnesota.

A classification of the information gathered by the association discloses that the fair this year will feature a million dollar stock show, a motor show having \$400,000 worth of 1917 cars, a machinery show worth \$250,000, in addition to the regular features of the Interstate expositions. In past years.

Breeders from eighteen states will be represented in the cattle and horse barns, while sheep and hogs will come from eight states. The cattle show will draw in only the classiest of the show animals shown at the four state fairs in the Sioux City territory, and the battle for prize awards will be of utmost interest to farmers and breeders throughout the middle west. The winners in these contests are to form in parade for Friday of fair week, when Iowa and Sioux City day will be the subject of celebration.

To give the Sioux City fair a more extensive hold on the territory and to make possible the extension of fair benefits in an educational and entertainment way the railroads are cooperating with the association and special trains will be scheduled for the week. These trains will be supplemented with extra car service on all the regular trains.

The Sioux City fair this year will present a \$9,000 racing program, which has brought to the entry lists some of the speediest pacers and trotters seen on western tracks. The speed program will feature running events each day of the week, and the total purse list for the runners was made high enough to draw in the big strings that ordinarily pass up the western fair circuit.

The grandstand guests are to be entertained with a vaudeville program of ten numbers. This program will be the means of assembling at Sioux City headline acts from the eastern vaudeville stages and from the big circuses. The program will have its savor of comedy and its share of thrills and will reach its climax in the flights of Miss Ruth Law, aviatrix, rated as the female Art Smith of the flying game. Miss Law is to make two flights each afternoon throughout the week, and will offer among other features the loop the loop, the aerial cart wheel, the vertical dive of 500 feet, and will close her program by flying upside down.

Organized as an educational institution as well as one for entertainment, the fair will present short course work in farming, cattle growing, domestic science, care of machinery, care of the motor car, development of farm homes and soil testing. Staffs of government experts will be in charge of these various features. The cattle pavilion, the administration buildings and motor row will be the scenes of their endeavor.

The fair this year will be opened by W. G. McAdoo, secretary of the treasury department and son-in-law of President Wilson, who will give an address before the grandstand on Monday afternoon. Secretary McAdoo will be accompanied to the fair by Assistant Secretary of Agriculture Vroman, who also is slated for a brief address.

During the week the association will entertain a number of notable from the interstate territory. On the occasion of the meeting at the fair grounds of some 2,000 by members of the corn clubs of the territory, high officials of the department of agriculture, with E. T. Meredith and W. L. Harding will make addresses.

In addition to the fair program business men have arranged down town attractions for the guests. These programs will take the form of special theatrical programs, while business houses will keep open house throughout the week. Information bureaus are being organized to handle the crowds, and \$10,000 is to be spent in special decorations emblematic of territorial wealth.

The association is arranging space on the grounds for the parking of motor cars. Room has been provided to care for 3,000 cars. The parking space will be extended free, as this has been found a convenience to out of town visitors. The growing use of the motor car has served to force an extension of the space devoted to the parking of cars.

Don't Be Slovenly.

Don't be slovenly in your dress. This applies to ladies only, as men are not supposed to wear dresses.

FEEDING AND PREPARING MARKET GEES



EMDEN GANDER SHOWN AT HAGERSTOWN FAIR.

The following were among the replies received by the United States Department of Agriculture to the question, "What is your method of feeding and preparing geese for market?"

Vincent M. Couch, Moravia, N. Y.: To fatten goslings, confine, and after five to six weeks make cornmeal the principal feed; add some beef scraps, and allow them to have some grass. Of the large breeds, they should weigh from 10 to 20 pounds at ten weeks old; and market at this age. Reserve the smaller breeds until holidays.

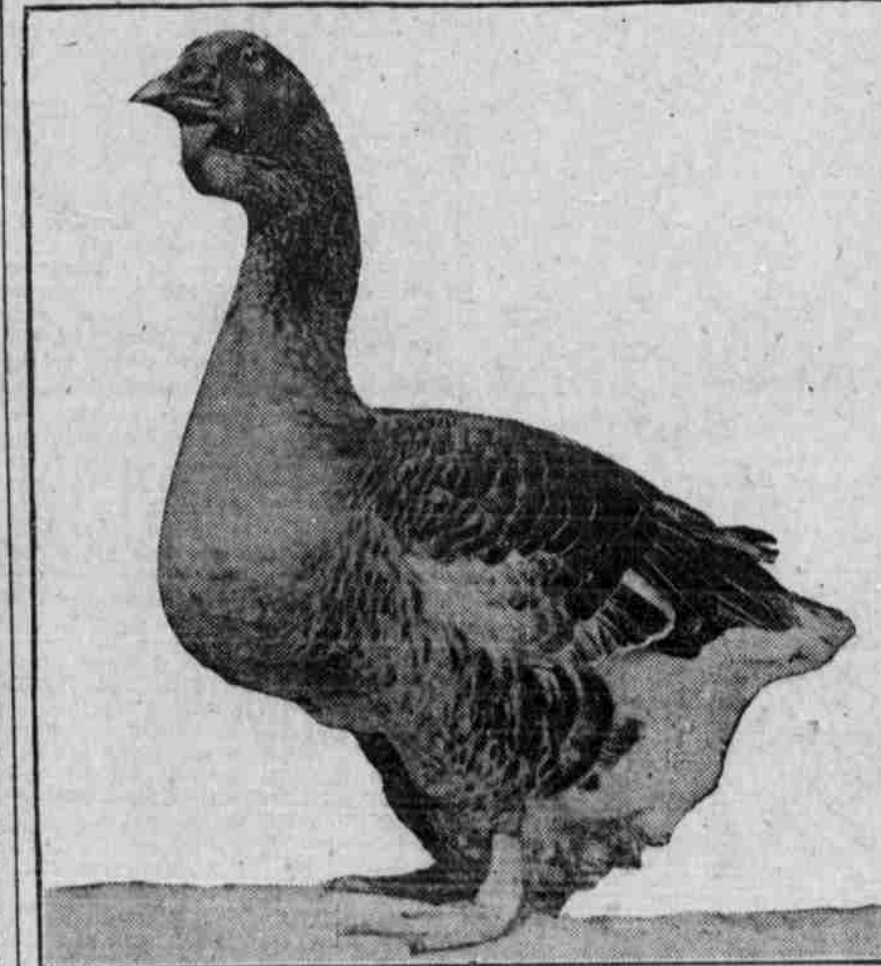
F. D. Fowler, Carlisle, Ill.: Market geese are kept closely confined and fed three times a day by measure: Bran 2 parts, shorts 1 part, oilmeal and beef scraps 1 part, cornmeal 1 part, dampened with water so it will crumble. Whole corn is sometimes given. Green food, grit, and water are always before them.

B. F. Hislop, Milford, Ill.: To prepare for market, as soon as weather becomes cool, confine in small lots. Commence to feed gradually mash composed largely of cornmeal, mixed with milk if convenient, otherwise water, giving enough forage or vegetables

to keep in health, increasing grain until they have all they will eat, twice a day, never forgetting plenty of water and a box of grit. By the time the goose market is on, say from Thanksgiving to New Year's, the birds will be in prime condition and bring top market price. To dress them, kill same as other poultry. Commence to pick the coarser feathers and most of the down off as soon as the fatal stab to brain is given and bleeding commences. Then sprinkle and rub well with powdered rosin, scald and rub down off quickly, plunge body in hot water then cold, wipe, and hang up or lay on table to cool before packing.

Mrs. M. Swartsley, Columbus, Neb.: To give size and flesh, I feed half cornmeal, one-fourth ground oats, the balance barley meal and wheat middlings, all mixed together with scalding water or milk, and feed as much as they will eat four or five times daily, at all times providing plenty of water.

M. B. Caldwell, Broughton, Kan.: As soon as our goslings are grown up we turn them in the hog pasture—ten acres of alfalfa—and they feed on alfalfa and eat after the hogs, and get very fat and heavy.



MALE TOULOUSE GOOSE.

CONTROL OF CHICKEN MITES

Unsatisfactory Growth in Summer May Be Caused by Vermin—Destructive Work at Night.

When well fed and otherwise properly managed, chickens do not always make satisfactory growth in summer. There is a cause for this which may be wholly unsuspected. It is likely to be due to the presence of chicken mites.

This pest is a blood-sucking parasite. It harbors under the perches, in cracks, and in other places. Its destructive work is done at night. When the chickens are at roost the mites crawl from their hiding places on to the birds. They gorge themselves with blood much the same as a mosquito does, and then crawl back to their hiding places.

If this pest is not discovered it multiplies into millions in a few weeks of hot weather.

If the mites become numerous, they will suck more blood from a chicken in a single night than the chicken can produce the next day from the digestion and assimilation of the most nourishing food. And since the blood carries the assimilated food for the growth of the different parts of the

body, there can be little or no growth so long as such a condition continues. The time and the labor of the poultryman, as well as the feed consumed, are thus practically wasted in the presence of chicken mites.

During the summer every precaution should be taken to keep the pens and roosting places free from mites. This is not a difficult matter. The mite is a very small parasite, barely perceptible with the unaided eye. When not gorged with chicken blood it is light-colored. It becomes red when it has gorged itself with chicken blood. For this reason it is sometimes called the "red" mite. But this pest is so delicately constructed that it can be easily destroyed by spraying with kerosene or whitewash.

VENTILATION IN THE SUMMER

Brooding and Roosting Coops Must Be Open to Permit Free Circulation of Air.

During the summer the brood coops and roosting coops must be very open so that plenty of air can circulate through them; otherwise the chicks will overheat at night, which will check their growth and reduce their vitality, making them less profitable.

CAPTURED BY WEST

GREAT CITY OF HANGCHOW, CHINA, IS MODERNIZED.

Completely Transformed, Largely by the Advent of American Business Firms—Danger of Its Going Ahead Too Quickly.

The visitor to Hangchow 600 years ago could well have been surprised, Silk-clad gentry rode through the paved streets in magnificent carriages, drawn by the finest of horses, or floated on the placid waters of beautiful West lake in great barges, with beautiful singers and graceful dancers to while away the hours, and silver and choice napery on tables to which were brought the delicacies of the known world. Thousands of bridges crossed myriad canals and the emperor's palace was the grandest in the world. Three thousand baths, accommodating a quarter million of people, catered to the desire for cleanliness.

Paper money passed freely, the births of children were recorded by the state, dead bodies were cremated, and the wealthy visitor, on arriving at his hotel, was compelled to register his name before being shown to his luxuriously upholstered bedroom. A census of the entire city was kept by the painting of the names over the house doors.

Today the office of a great sewing machine company occupies a place on the once famous Great street; British-American tobacco has taken the place of opium since 8,000 opium pipes were burned in a single bonfire; and the Standard Oil company is preparing to sell motor spirit instead of kerosene, after a short but decisive battle with the Mazda globe.

I saw the first carriage that modern residents have ever seen in Hangchow. It was very popular for several weeks, but it was almost immediately pushed into second place by the advent of an automobile. From ricksha to carriage, and from carriage to motor car was the change of a single month. Both carriage and motor car were shipped in by rail or canal, for although one can go from Hangchow to Shanghai in a 30-mile-an-hour express, he cannot drive in a carriage between the two cities under any circumstances.

Foreign goods are appearing in shops, once the finest in the world. Many of the men are already wearing western dress and even a few of the women occasionally wear new world fashions. With its loss of oriental character, Hangchow is gaining in wealth and importance. The great fan shop, patronized by pilgrims from the four corners of China's vast domain, bears on its walls certificates of excellence from the expositions of Europe and America. The simple but keen-minded Chinese are coming into constant contact with the foreigner. Last spring I watched the progress of a party of wealthy foreigners from Shanghai down the newly paved street into the newly built hotel district. One of the ladies not only attracted my attention, but that of many of the polite Chinese as well. Her carmine lips held a cigarette and her crossed legs displayed the latest style of sheer hose.

The Chinaman knows his place. He never presumes. But many of them already prefer foreign wives to women from their own race. Western culture is pervading this beautiful city, which has so far only been influenced by the missionary class. Hangchow's beauty threatens to spoil her.—Maynard Owen Williams in World Culture.

One of the Family.

Mrs. West was on the street car one day when one of the passengers suffered an accident. The conductor took the names of the witnesses, but Mrs. West, to avoid being summoned to court, gave a fictitious name and address.

The next morning her colored cook ventured the remark that "that man musta been hurt mighty bad yesterday."

"Oh, were you on the car, Miranda?" asked her mistress. "I didn't see you."

"Yass'm, I was settin' right behind you."

"Well, Miranda, hope they didn't get your name, for I couldn't spare you to go to court."

"Oh, no'm; I didn't give 'em my right name. They'll never find me."

"What did you tell them?" asked Mrs. West, wondering how far Miranda's imagination had led her.

"Well'm, I heard you say 'Mrs. Hawkins,' so I sez 'Miss Hawkins.'—Harper's Magazine.

Grim Fun.

Frederick Palmer, the war correspondent, said at a dinner in New York: "Girls all over England are making ammunition now. Lady Mary Hamilton, Miss Nancy Curd, Lady Diana Manners—all the lovely girls are making ammunition."

"They say a girl was talking one day at a tea about her ammunition factory work."

"Oh," she said, "it's just as easy as anything to make a high-explosive shell. You take a tablespoonful of nitroglycerin, two cupsful of gun cotton, half a cupful of trinitrotoluol, three cupfuls of lyddite, and so on, just like the cook books you know."

Precaution.

"I am no sentimentalist. I am a man of deeds and few words. Will you marry me, Mabel?"

"First, let me have a look at the deeds."